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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,753	03/03/2000	James F. Arnold	SRIIP013X1	6922
52197 7590 09/20/2007 PATTERSON & SHERIDAN, LLP SRI INTERNATIONAL 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702			EXAMINER DIVECHA, KAMAL B	
			ART UNIT 2151	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

80

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/518,753	ARNOLD ET AL.	
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

Claims 1, 3-5, 9, 10, 12-14, 16-20 and 34 are pending in this application.

Claim 6 is cancelled in response filed on 8/21/07.

Claims 2, 7, 8, 11, 15 and 21-33 were previously cancelled.

**Response to Arguments**

Applicant's arguments filed August 21, 2007 have been fully considered but they are not persuasive.

In response filed applicant argues in substance that:

a. In particular, the applicants respectfully submit that Lathrop, Wesley, and Ma individually or in any permissible combination, fails to teach, show or suggest the novel invention of, in a client/server object-based computing system including a first computing device and a second computing device, attempting to send a data packet representing an object in which the second computing has interest by placing the packet of data in a queue of objects in which the second computing device has interest using the first computing system, the queue being maintained by the first computing system and arranged to prioritize the packets of data with respect to any other packets of data included in the queue, as claimed by the applicants independent claims 1, 9 14, 18 and 34 (remarks, page 12 [II]).

In response to argument [a], Examiner respectfully disagrees.

The recitation "placing the packet of data in a queue....." merely calls for prioritizing the transmission of the data packets in a queue or a buffer.

Initially, it should be noted that data packets that are transmitted from one computing system to another computing system, are first placed in a buffer and/or queue for transmission, as is known in the art.

Wesley, at column 5 lines 20-30, teaches the process wherein “the protocols which route data to and from the wireless network interfaces (a wireless network interface is associated with a computer system) utilize buffering techniques, i.e. queuing data packets, prioritized transmissions and slotting protocols...”

In other words, Wesley teaches the process wherein the data packets are placed in buffer and/or queue and transmitted according to their priority as taught by the term “prioritized transmissions”.

Note the usage of the terms “to and from” in the teachings. It actually conveys that buffering and prioritization occurs at both ends, i.e. the transmitting and the receiving end.

Therefore, Wesley does in fact teach and suggest the usage of queue maintained by the first computer system and prioritization of transmissions of the data packets.

Art Unit: 2151

b. By contrast...however, the reference do not suggest how to implement such prioritized transmissions, and certainly do not suggest that such prioritized transmissions may be implemented by use of a queue (remarks, pg. 12).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., how to implement such prioritized transmissions) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Stated another way, the claim merely suggests prioritizing the data transmissions, but fails to disclose how to implement such prioritized transmissions and/or how the prioritization is actually achieved.

**Claim Rejections - 35 USC § 101**

The 35 U.S.C. 101 rejections presented in the previous office action is withdrawn due to inclusion of the computer-readable media, processor and execution of the steps, as well as deletion of the computer codes.

Please note: the computer-readable media is interpreted as the computer-readable storage media, such as CD-Rs, hard drives, ROMS, RAM, etc.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1, 3-5, 9, 10, 12-14, 16-20 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 1 recites "...any other packets of data...". The recitation renders the claim indefinite because it is unclear which packets of data the term "any other" is referring to, thus enabling the scope of the claim unascertainable.

Also, the claim calls for prioritizing the packets of data with respect to any other packets of data. However, the claim only refers to one type of packet of data, such as packet of data in which the second computing system has interest. As such, it is unclear how the process of "prioritization" is performed when there is only one type of data packets.

Claims 3-5, 9, 10, 12-14, 16-20 and 34 are rejected for the same reasons as set forth in claim 1.

Applicant is required to take appropriate action.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 3-5, 9, 10, 12-14, 16-20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lathrop (U. S. Patent No. 5,701,427) in view of Wesley (US 6,076,114) and further in view of Ma et al. (hereinafter Ma, US 5,920,725).

As per claim 1, Lathrop discloses a method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system (simply interpreted as client/server architecture), wherein the first computing system is a server and the second computing system is a client (see fig. 1 and col. 1 L43 to col. 2 L33), the method comprising:

Art Unit: 2151

identifying the packet of data using the first computing system, wherein said second computing system is listening (fig. 2 item #36, 37 and 34; col. 5 L33-49), wherein the packet of data includes data which represents an object in the client/server object-based computing system (i.e. data or information or item in a message in a client/server architecture), the object been identified as an object which the second computing system has an interest in receiving updates (col. 5 L33-66);

attempting to send the packet of data from the first computing system to the second computing system (fig. 2 item #32, 38; fig. 7A and 7B) by the process of placing the packet of data in a queue using the first computing system, and removing the packet of data from the queue using the second computing system (col. 22 L49-63);

determining when the packet is received by the second computing system (fig. 7A item #260-262 and fig. 7B item #263-264);

re-attempting at least once to send the packet of data from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein each re-attempt is based on a delay and/or time differential (col. 2 L2-20, col. 7 L20-25, col. 9 L59 to col. 10 L65, col. 11 L64 to col. 12 L41, col. 14 L40-53, col. 20 L54 to col. 21 L19).

However Lathrop does not disclose the process wherein the object includes data and functionality, the process of sending an acknowledgement from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system; the process wherein a time differential between each



Art Unit: 2151

re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received and the process wherein the queue is arranged to prioritize the packet of data with respect to any packets of data associated with the queue.

Wesley, from the same field of endeavor clearly discloses the process of sending an acknowledgement from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system (fig. 1, fig. 5 item #504, col. 3 L20 to col. 4 L31, col. 5 L40 to col. 6 L63, col. 7 L45-67) and the process of re-attempting to send the data packet at least once from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received (i.e. time differential is based on round trip time for a packet, fig. 5 item #506, 512, fig. 6, fig. 7, col. 4 L32 to col. 5 L39, col. 5 L41 to col. 6 L63, col. 7 L45 to col. 8 L25, col. 11 L50 to col. 12 L21); and the process wherein the queue, i.e. buffer, is arranged to prioritize the packet of data with respect to any packets associated with the queue (col. 5 L6-39: the protocols which route data to and from the interface utilize buffering techniques and prioritized transmissions).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Wesley as stated above with Lathrop, in order to employ the process of sending an acknowledgement from the client to the server when it

Art Unit: 2151

is determined that the packet is received by the client and to indicate that the packet is received by the client and the process wherein the time differential is determined using the statistical information such as a round trip time of a packet and prioritize transmissions.

One of ordinary skilled in the art would have been motivated because it would have improved reliability of data transmissions in a communications network (Wesley: col. 4 L18 to col. 5 L67, col. 7 L45-67).

However, Lathrop in view of Wesley does not disclose the process wherein the object includes data and functionality (i.e. objects, as understood in the field of object-oriented computing systems and as specified by the applicant's specification "are generally programming units which include data and functionality and are instances of classes").

Ma, from the same field of endeavor, explicitly discloses the process of sending a packet of data from the server to the client, wherein the packet of data includes data which represents an object in the client/server object-oriented computing system and wherein the object includes data and functionality (fig. 1: client/server architecture, fig. 2 item #34 and #42, fig. 6: client/server, col. 2 L1 to col. 3 L56, col. 5 L60 to col. 6 L67, col. 7 L1-56, col. 13 L40 to col. 14 L30).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lathrop in view of Wesley, and further in view of Ma in order to transmit a packet of data which includes an object comprising a data and functionality.

One of ordinary skilled in the art would have been motivated because this would have enabled an application to be updated that comprises plurality of objects (Ma, col. 15 L13-48 and col. 1 L15 to col. 2 L12).

As per claim 3, Lathrop discloses the process wherein re-attempting to send the packet of data does not include attempting to establish communications between the first computing system and the second computing system (col. 15 L35 to col. 16 L16).

As per claim 4, Lathrop discloses the process of determining when the re-attempt to send the packet of data is successful, wherein when it is determined that the re-attempt to send the packet of data is not successful, an attempt is made to establish communications between the first computing system and the second computing system (col. 20 L4 to col. 22 L14 and fig. 6A-7B; col. 19 L57 to col. 20 L31).

As per claim 5, Lathrop discloses the process of establishing a connection between the first computing system and the second computing system before identifying the packet of data (Lathrop, fig. 6A item #200-202 and fig. 1).

However, Lathrop does not disclose the connection being a wireless connection.

Wesley, from the same field of endeavor discloses a system and a method for delivery of information over a wireless link, connection and/or network (col. 3 L20 to col. 4 L67, col. 5 L21-40, col. 5 L41 to col. 6 L64).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Wesley as stated above with Lathrop in order to utilize wireless connection for delivering data.

One of ordinary skilled in the art would have been motivated because of the improved performance level in a wireless network (Wesley, col. 4 L10-31, col. 5 L20-39).

As per claim 9, Lathrop discloses a method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second

Art Unit: 2151

computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client (see fig. 1 and col. 1 L43 to col. 2 L33), the method comprising:

attempting to send the packet of data from the first computing system to the second computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system (fig. 2 item #32, 38; fig. 7A and 7B and col. 6 L51 to col. 7 L26), the object been identified as an object which the second computing system has an interest in receiving updates, by the process of placing the packet of data in a queue using the first computing system, and removing the packet of data from the queue using the second computing system (col. 22 L49-63);

determining when the packet is received by the second computing system (fig. 7A item #260-262 and fig. 7B item #263-264); and

assuming that packet losses have occurred when it is determined that the packet of data is not received by the second computing system (col. 7 L20-41), wherein assuming that packet losses have occurred includes repeating a) and b) for up to predetermined maximum number of times (col. 9 L49-66).

However, Lathrop does not disclose the process wherein the object includes data and functionality and the process of identifying the packet of data as being successfully sent when it is determined that the packet of data is received by the second (i.e. by sending an acknowledgement message to the sender) and the process wherein a time differential between each attempt at repeating a) and b) is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received

Art Unit: 2151

and the process wherein the queue being maintained by the first computing system and arranged to prioritize the packet of data with respect to any packets of data associated with the queue.

Wesley, from the same field of endeavor clearly discloses the process of sending an acknowledgement from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system (fig. 1, fig. 5 item #504, col. 3 L20 to col. 4 L31, col. 5 L40 to col. 6 L63, col. 7 L45-67) and the process of re-attempting to send the data packet at least once from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received (i.e. time differential is based on round trip time for a packet, fig. 5 item #506, 512, fig. 6, fig. 7, col. 4 L32 to col. 5 L39, col. 5 L41 to col. 6 L63, col. 7 L45 to col. 8 L25, col. 11 L50 to col. 12 L21) and the process wherein the queue, i.e. buffer, is arranged to prioritize the packet of data with respect to any packets associated with the queue (col. 5 L6-39: the protocols which route data to and from the interface utilize buffering techniques and prioritized transmissions).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Wesley as stated above with Lathrop, in order to employ the process of sending an acknowledgement from the client to the server when it is determined that the packet is received by the client and to indicate that the packet is received

Art Unit: 2151

by the client and the process wherein the time differential is determined using the statistical information such as a round trip time of a packet and prioritize queues.

One of ordinary skilled in the art would have been motivated because it would have improved reliability of data transmissions in a communications network (Wesley: col. 4 L18 to col. 5 L67).

However, Lathrop in view of Wesley does not disclose the process wherein the object includes data and functionality (i.e. objects, as understood in the field of object-oriented computing systems and as specified by the applicant's specification "are generally programming units which include data and functionality and are instances of classes").

Ma, from the same field of endeavor, explicitly discloses the process of sending a packet of data from the server to the client, wherein the packet of data includes data which represents an object in the client/server object-oriented computing system and wherein the object includes data and functionality (fig. 1: client/server architecture, fig. 2 item #34 and #42, fig. 6: client/server, col. 2 L1 to col. 3 L56, col. 5 L60 to col. 6 L67, col. 7 L1-56, col. 13 L40 to col. 14 L30).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lathrop in view of Wesley, and further in view of Ma in order to transmit a packet of data which includes an object comprising a data and functionality.

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 1.

As per claim 10, Lathrop discloses the process of repeating the process of a) and b) until is determined that the packet of data is successfully sent (col. 12 L2-15).

As per claim 12, Lathrop discloses the process wherein a) and b) have repeated a predetermined number of times, at least one attempt is made to establish a connection between the first computing system and the second computing system (col. 19 L33 to col. 20 L53).

As per claim 13, Lathrop discloses the process of determining when the at least one attempt to establish the connection between the first computing system and the second computing system is successful, wherein when it is determined that the at least one attempt to establish the connection is successful, a) and b) are repeated (col. 19 L33 to col. 20 L55 and col. 18 L25-30).

As per claim 34, Lathrop discloses a method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client (see fig. 1), the method comprising:

identifying the packet of data using the first computing system, wherein said second computing system is listening (fig. 2 item #36, 37 and 34; col. 5 L33-49), wherein the packet of data includes data which represents an object in the client/server object-based computing system (i.e. data or information), the object been identified as an object which the second computing system has an interest in receiving updates (col. 5 L33-66);

attempting to send the packet of data from the first computing system to the second computing system (fig. 2 item #32, 38; fig. 7A and 7B) by the process of placing the packet of data in a queue using the first computing system, and removing the packet of data from the queue using the second computing system (col. 22 L49-63);

determining when the packet is received by the second computing system (fig. 7A item #260-262 and fig. 7B item #263-264);

re-attempting at least once to send the packet of data from the first computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein each re-attempt is based on a delay and/or time differential (col. 2 L2-20, col. 7 L20-25, col. 9 L59 to col. 10 L65, col. 11 L64 to col. 12 L41, col. 14 L40-53, col. 20 L54 to col. 21 L19).

However Lathrop does not disclose the process wherein the object includes data and functionality, the process of sending an acknowledgement from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system; the process wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received process and the process wherein the queue being maintained by the first computing system and arranged to prioritize the packet of data with respect to any packets of data associated with the queue.

Wesley, from the same field of endeavor clearly discloses the process of sending an acknowledgement from the second computing system to the first computing system when it is determined that the packet of data is received by the second computing system, the acknowledgement being arranged to indicate that the packet of data is received by the second computing system (fig. 1, fig. 5 item #504, col. 3 L20 to col. 4 L31, col. 5 L40 to col. 6 L63, col. 7 L45-67) and the process of re-attempting to send the data packet at least once from the first



Art Unit: 2151

computing system to the second computing system when it is determined that the packet of data is not received by the second computing system, wherein a time differential between each re-attempt is determined using statistical information including at least one measurement of an amount of time elapsed for another packet of data to be sent and received (i.e. time differential is based on round trip time for a packet, fig. 5 item #506, 512, fig. 6, fig. 7, col. 4 L32 to col. 5 L39, col. 5 L41 to col. 6 L63, col. 7 L45 to col. 8 L25, col. 11 L50 to col. 12 L21) and the process wherein the queue, i.e. buffer, is arranged to prioritize the packet of data with respect to any packets associated with the queue (col. 5 L6-39: the protocols which route data to and from the interface utilize buffering techniques and prioritized transmissions).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Wesley as stated above with Lathrop, in order to employ the process of sending an acknowledgement from the client to the server when it is determined that the packet is received by the client and to indicate that the packet is received by the client and the process wherein the time differential is determined using the statistical information such as a round trip time of a packet and prioritize the transmissions of data packets.

One of ordinary skilled in the art would have been motivated because it would have improved reliability of data transmissions in a communications network (Wesley: col. 4 L18 to col. 5 L67).

However, Lathrop in view of Wesley does not disclose the process wherein the object is represented in an object list in the first computing system, the object list arranged to include objects that are to be updated, and the object also being represented in a filter tree which is

Art Unit: 2151

arranged to identify objects that the second computing system has an interest in, wherein the object includes data and functionality.

Ma, from the same field of endeavor, discloses the process wherein the objects are represented in an object list in a server, the object list arranged to include objects that are to be updated and represented in a filter tree to identify objects that the client has an interest in, wherein the object include data and functionality (fig. 1: client/server architecture, fig. 2 item #34 and #42, fig. 6: client/server, col. 4 L42-49, col. 2 L1 to col. 3 L56, col. 5 L60 to col. 6 L67, col. 7 L1-56, col. 9 L45 to col. 10 L45, col. 13 L40 to col. 14 L30).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lathrop in view of Wesley, and further in view of Ma, in order to employ an object list in a server and further objects being represented in a filter tree that are to be updated and wherein the client has an interest in, since Ma teaches the process of forming a filter tree and an object list at the server, which the client has an interest in.

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 1.

As per claims 14 and 16-20, they do not teach or further define over the limitations in claims 1, 3-5, 9, 10, 12, 13 and 34. Therefore claims 14 and 16-20 are rejected for the same reasons as set forth in claims 1, 3-6, 9, 10, 12, 13 and 34.

**Additional References**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Oguns, U. S. Patent No.: 6,438,603 B1: Reliable and Non-reliable channels of a single network communication link.
- b. Chikuma et al., U. S. Patent No. 6,947,435 B1: Communication system.
- c. Carr, U. S. Patent No. 4,718,002.
- d. Doshi et al., U. S. Patent No. 5,550,848.
- e. Varma et al., US 5,859,835: Traffic Scheduling: Queues and Prioritization.

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection (35 U.S.C. 112, second paragraph rejections) presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2151

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Wallace can be reached on 571-272-3440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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